



# IJRU Rule Book

## Judging Manual

Version 1.0.0...1.1.0-pr.1

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## 2 NUMBER AND ROLES OF JUDGES

The minimum number of judges required for any event is detailed below with the recommended number in parentheses.

### 2.1 FREESTYLE EVENTS

2 (3)	P <sub>A</sub> Judges	Athlete Presentation – Form and Execution, and Misses
2 (3)	P <sub>R</sub> Judges	Routine Presentation – Entertainment, Musicality, and Repeated Skills
2 (3)	R Judges	Required Elements, Misses, and Time- and Space Violations
3 (5)	D Judges	Difficulty

### 2.2 SHOW FREESTYLE EVENTS

3	P <sub>A</sub> Judges	Athlete Presentation – Form and Execution, and Athlete Style
3	P <sub>R</sub> Judges	Routine Presentation – Entertainment, and Choreography
3	R Judges	Required Disciplines, Misses, and Time Violations
5	D Judges	Difficulty

### 2.3 SPEED AND MULTIPLES EVENTS

1	<u>Head Judge</u>
2	<u>Speed Judges</u>

## 2.4 JUDGE EXPECTATIONS AND CODE OF ETHICS

Judges should:

- Ensure that the actions of the athletes follow the rules. In fulfilling this task, the official must establish the best possible climate for fair competition with the attention on the athletes.
- Maintain Judges Certification.
- Participate in the online continuing education within the IJRU training portal.
- Watch routines on videotape or at their local team's practices and analyze them as if you were a judge.
- Practice clicking speed and identifying deductions.
- Be very familiar with and knowledgeable about all rules and procedures as described in the most current IJRU Rule Book.
- Become confident and comfortable with the responsibilities of all judging positions for which they are assigned.
- Be very familiar and confident in following through the competition procedures set forth by the IJRU.
- Be familiar enough with the judging system and scoring collection method to be able to score routines quickly as well as accurately, to keep tournaments running smoothly.
- Always be punctual, pleasant, and polite while judging.
- Be impartial. Avoid coaching or cheering for any certain competitor or competitors.
- Be friendly with their fellow judges but refrain from any comments or discussion while judging.
- Attend all judges' meetings prior to the competition they are judging at as required by the Tournament Director.
- Look professional. In most cases, an official judging shirt will be provided.
  - If not, judges should wear a plain, black shirt free of logos.
  - They should wear black pants, shorts, or skirt when judging.
  - They should make sure there are no markings on any piece of clothing or on them that can identify them as being affiliated with any team or competitor.
  - Wear athletic shoes, no flip-flops, sandals or bare feet.
- Personal cell phone use is not allowed while judging. No videoing is allowed from the judging table.
- The conduct of each judge affects the public's attitude toward all judges. Therefore, every judge must uphold the honor, integrity and dignity of the role.

## 3 JUDGING SPEED AND MULTIPLES EVENTS

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### 3.1 GENERAL

Judges will count the jumps of each athlete from the beginning to the end of each speed and multiples event, using an IJRU-approved device.

Head Judges are responsible for:

- All communication at a station. This includes communication with the tournament director, athlete(s), and coaches.
- Showing the athlete(s) where the camera is in the station (if video replay is being used)
- Checking that the correct athlete is at their station before the event starts.
- Reporting false starts and false switches after confirming that a majority of judges agree a false start or switch has occurred.

Head Judges may communicate an approximate, unofficial score to the athlete.

If 2 of the 3 judges scores differ by more than 3 for a speed or multiples event, the head judge must record the scores on the score sheet and immediately notify the tournament director, prior to the start of the next heat.

Where scores are not automatically collected from each judge by electronic means, or in the case of an electronic system failure in use, it is the Head Judge's responsibility to record the exact number shown on all the station's judges' approved devices onto a scoresheet. The head judge may record 1 less than the number shown on the judges' devices if the judge communicates that in accordance with the rules below.

### 3.2 COUNTING

#### 3.2.1 General

No deductions are made for any misses in speed or multiples events.

Single ropes must be turned in a forward motion, whereas Double Dutch ropes must be turned counterclockwise with the right hand and clockwise with the left hand.

#### 3.2.2 Speed

For speed events, judges count the first completed right foot jump and each additional alternating right foot jump.

If an athlete misses and the judge recognizes they counted the jump the miss occurred on, the judge will resume counting on the right foot jump once the athlete completes a right foot jump, followed by a left foot jump. If an athlete misses at the end of an event and a judge has not yet taken off a jump, they will deduct one jump from the final score.

### 3.2.3 Double Unders

For double unders, judges count each jump where both feet land simultaneously after the rope has passed under the feet twice, while completing two forward vertical rotations around the body.

If an athlete misses and the judge recognizes they have counted the double under the miss occurred on, the judge will resume counting again on the second double under following the miss. If an athlete misses at the end of an event and a judge has not yet taken off a jump, they will deduct one jump from the final score.

### 3.2.4 Consecutive Triple Unders

For triple unders, judges count each jump where both feet land simultaneously after the rope has passed under the feet three times, while completing three forward vertical rotations around the body.

Once an athlete has completed one triple under, judges stop counting when the athlete either stops, misses, or completes any skill other than a triple under.

If an athlete misses before completing 15 triple unders, they will have one more attempt at starting the event. If the athlete decides to continue with a second attempt, the scores will be reset (not recorded) and the athlete is committed to the score of the second attempt.

30 seconds after the start of the event, the athlete is no longer eligible to begin the event or start a second attempt and the judges must not count any triple unders performed by the athlete.

Time the judges take to get ready or reset their counters is not counted against the athlete's 30 seconds. However, if an athlete misses before the 30 second call-out and the judges are not ready to start again before the 30 seconds call-out, the athlete is allowed to start immediately after the judges are ready, even if that is after the 30 seconds call-out.

## 3.3 FALSE STARTS

A false start occurs if an athlete's rope begins a rotation before the start signal.

A false start results in a deduction from the score. See section 7.3 for deduction values.

All judges need to watch for and report false starts to the head judge following the heat. A majority of judges must agree that a false start occurred for the athlete(s) to receive a deduction.

If a false start occurs, all judges are still required to count the event.

### 3.4 FALSE SWITCHES

In team speed or multiples events, a false switch may occur if an athlete's rope begins a rotation, or if an athlete takes the ropes from a turner or enters the ropes before the signal to switch sounds.

Each false switch results in a deduction from the score. See section 7.3 for deduction values.

All judges need to watch for and report false switches to the head judge following the heat. A majority of judges need to agree on the number of false switches that occurred in an event.

During a Single Rope speed or multiples event with more than one athlete, when the switch beep occurs, judges immediately stop counting the prior athlete and start counting the next. Any extra jumps by the prior athlete after the beep are not counted but also not penalized.

For Double Dutch Speed Relay (DDSR), the following turning and jumping order must be followed:

1. A and B turn for C, who is facing B
2. A and C turn for D, who is facing A
3. D and C turn for B, who is facing C
4. D and B turn for A, who is facing D

Judges should not count any jumps that are not performed in this manner.

### 3.5 SPACE VIOLATIONS

A space violation occurs any time part of an athlete's body touches the ground outside of the competition boundary.

A team may receive a space violation for any team member competing in the event who commits a space violation, including members of the team who are competing in the event but not actively jumping at the time of the space violation.

During a space violation, the judges must stop counting, and the head judge must verbally notify the athlete(s) that they are out of bounds.

Judges resume counting once the athlete(s) have re-entered the competition area.

An athlete cannot receive an additional space violation until they have successfully completed a counted jump within the competition area.

If a space violation interferes with, obstructs, or impedes an opposing athlete/teams' rope(s), the head judge will award a re-jump to the affected athlete/team. The affected athlete/team can decide if they wish to accept the re-jump or submit their current score. They must notify the head judge of their decision before leaving the competition floor.

## 4 JUDGING FREESTYLE EVENTS

Freestyle judges will evaluate routines based on difficulty and presentation. Judges will also record any deductions.

### 4.1 DIFFICULTY

#### 4.1.1 General

Difficulty judges will award a level for each skill performed in Single Rope, Wheel and Double Dutch routines. A skill is defined as a motion of the rope and/or athlete, beyond a double bounce jump, single bounce or basic side-swing, that is assigned a level of difficulty. The starting levels of difficulty and modifiers are described in the paragraphs below and illustrated using tables/matrices.

At the top of each table/matrix column is the level of difficulty (0.5, 1, 2, etc.) with the skills in that level below it. Each row groups skills by element (multiples, power, rope manipulations, etc). If a skill includes two “starting value” skills, add the value of the skills together to get a total level of difficulty for the skill. A 0.5 level does not add difficulty to another skill/component.

During a routine, the difficulty judges mark the difficulty level of each skill successfully performed within the time limit of the routine.

#### 4.1.2 Single Rope

The Single Rope freestyle skills and modifiers are grouped by elements below. For freestyle with more than one athlete, if different skills are performed simultaneously, award credit for the lowest skill completed. If one athlete misses during a skill, this skill does not count, and no difficulty will be awarded until all athletes have resumed executing skills.

Starting level	0	0.5	1	2	3	4	5	6
Multiples	Single		Double	Triple	Quad	Quintuple	Sextuple	Septuple
<b>Power</b>		Bubble (regardless of the number of wraps)	Basic power (not pulling rope): basic frog, basic push-up, butt bounce, back jump	Power pulling rope: frog exit, push-up, crab, two footed entry for frog	One handed power			Backwards power: examples-darkside, sunny D
<b>Gymnastics</b>			Cartwheel and round-off	Handsprings, kip, suicide	Flips			
<b>Rope Manipulation</b>	Side swing	Criss-cross, 180 on the ground	One hand restricted: toad (leg over cross), cougar (leg over), EB (one hand behind back)	Both hands restricted: AS, CL, TS, caboose, elephant, weave				
<b>Releases</b>			Basic release, inversed release, snake release, floater	Mic release, 2 handled rope release	Lasso (snake release above head, catching it out of the air)			
<b>Scoops / Interactions</b>			One athlete is scooped and basic wheel jumping, basic leap frog	Multiple athletes are jumped by scoop, Multiple ropes moving during scoop, leap frog (scoop)	Multiple ropes + multiple athletes moving during scoop			
<b>Footwork</b>		Footwork						

When scoring wraps, score an individual level of difficulty for every time the rope passes under the body or as a wrapped side swing (+1 level for jumping a wrapped rope, with each additional wrap around the body that is jumped adding a level, with a limit of +3).

When scoring releases, score the release as a separate skill unless the release is caught, and a skill is completed with it all in the air at the same time.

A multiple is when a rope makes more than one rotation around the athlete's body while the athlete is in the air, if the multiple starts with a side-swing the athlete's feet must have left the ground before the rope pass by their feet, similarly if a multiple ends with a side-swing the rope must have passed the athlete's feet before the athlete's feet touch the ground, otherwise those rotations are not counted and the skill is credited considering the fewer rotations.

The following modifications will add 1 level to the skill being performed (unless otherwise specified):

#### *Multiples*

- Body rotation (at least 270 degrees in twist or flip direction): EK, BC, Full Twist
- An additional +1 level for every 180-degree turned in the air beyond a 360 when jumped  
ex. 540, 720, 900

#### *Power/gymnastics*

- [Crosses](#)[Criss-cross](#) performed with power/strength skill and/or flips (criss-cross, EB, Toad...)
- Landing in push-up, split or crab position
- Landing in frog position (+2)
- Assisted flips interaction (unless one athlete is supporting an athlete all the way around in the flip, in which case, reduce the level by 1)
- An additional +1 level for every 90 degree turn in power when the rope is pulled

#### *Manipulations*

- Switch crosses (AS×AS, criss-cross×criss-cross, AS×CL as long as the arm on top changes...)
- Go-go's/crazy criss-cross (one hand crosses twice across body, leg or arm without uncrossing)
- Wraps (scored as explained above)
- Change direction of rope movement in the air (EK- rope continues in same direction: doesn't count)
- Switching handles
- Transition jump (jumping a one hand restricted skill and in one jump, jumping the opposite side one hand restricted skill (such as crouger-crouger))

#### *Releases*

- Catching a release in a restricted position
- Releasing a handle in a restricted position if, and only if, the hand is completely behind the body (behind the back or behind both legs)
- Catching a release with something other than a hand (such as scooping the rope, squeezing it with a body part, or landing the rope on a foot, shoulder or similar, jumping the rope with the rope caught on a body part)

#### *Negative modifiers/limits*

- -1 level: Gymnastics with rope held with one hand

***Exceptions***

- Kips and front handsprings with a whip (pulling the rope under before landing) are level 6
- The money-maker/kamikaze frog, back handspring pulling rope under before landing on hands are level 7

***Example Skills and Explanation***

The matrix is to be used as a baseline for determining the difficulty level of each skill completed. A single double under is considered a level 1 skill. If a restricted arm movement is added to the double under (ex: double under leg cross), a judge must then add the level 1 of the double under with the Level 1 of a restricted arm, thus the level the judge records is a level 2 for that skill. If the same skill is completed in a triple under, the level recorded would be level 3. Restricted arm cross is level 1, triple under is level 2, making a TJ, with a total level 3.

Several base skill levels can be added together to create a higher level for one skill. For example, a backflip that includes a triple under and an under the leg cross (TJ) would earn a level 6. Backflip is level 3, Triple Under is level 2, and an under the leg cross level 1.

CrossesCriss-Cross do not increase the level of difficulty in multiples, but they do it does increase the difficulty levels in power and gymnastics skills. A frog jumped in isolation is a level 2 for landing the frog with the rope pulled under. When a criss-cross landing is added to the frog, the skill becomes a level 3.

A judge must be familiar enough with jump rope movements and skills that they can easily determine the level of the skills as they happen and enter the correct level on the designated method of score collection.

#### 4.1.3 Double Dutch

Double Dutch skills and modifiers are grouped by elements below. For Double Dutch pairs freestyle, if different skills are performed simultaneously, award credit for the lowest skill completed, unless the interaction is listed as a modifier.

Double Dutch skills are scored per snapshot which is the sum of the difficulty of the trick the jumpers are doing when a rope passes under their feet/hands added to the difficulty of what the turners are doing with that rope at the time. (For example, when jumping over one rope the jumper is transitioning from an upright jump to a push-up (L2), on the next rope the jumper is transitioning from a push-up to an upright jump (L2), one turner restricts this rope by an arm turned under the knee in a croucher position (+1) resulting in a Level 3 snapshot. This sequence would be scored Level 2, Level 3).

A difficulty level is awarded to all jumps where all athletes are actively involved with the skill (for example, assisting a flip into the ropes while standing outside the ropes is credited because the assisting athlete is actively involved in performing the skill. Similarly, turner involvement skills can be credited on its own as long as all the athletes who are not turning are jumping in the ropes).

Skill level	0	0.5	1	2	3	4
<b>Multiples</b>	Single		Double	Triples and quads	Quints and sextuples	Septuplets and octuplets
<b>Power</b>			Mountain climber, power without jumping the rope (ex: up the ladder push-up), piggyback	Frog, push-up, crabs, butt bounces, back jump, splits, leap frog, kip	Hand hops, two-foot frogs, v kick, backbends/bridges	
<b>Gymnastics</b>			Cartwheel, round-off, 360-degree rotation of body	Handsprings, suicide	Flips	
<b>Turner involvement</b>	Basic turning (backwards and forwards)	Synchronized Wheel	Pinwheel, Wheel, turner skills only involving one hand movement (ex: leg over, and criss-cross)	Turner skills involving more than one hand movement (ex: restriction of both hands, power skills, and gymnastics)		
<b>Releases</b>			Helicopter, floaters	Mic, two handled release		
<b>Switches</b>		Basic switch (athlete does not enter with next turned rope)	Quick switch, Wheel switch, Exchange of handles during Wheel, any interaction between jumper and turner			
<b>Footwork</b>		Footwork				

A turner involvement skill will only add a level of difficulty when the turner(s) transition between turner skills. This means that a turner involvement skill will not continue to add a level of difficulty if the turner holds the skill for more than 2 jumps.

For turner involvement skills completed in wheel, judges should use the wheel difficulty matrix, with +1 for turning in wheel, in addition to the skill value in the wheel matrix. Note that .5 skills do not increase difficulty levels of another skill or component.

The “starting value” of turner involvement skills is awarded per turner except for:

- Basic pin wheel
- Basic Wheel

This means that if both turners restrict the same rope under one knee in a crouger position while in normal double dutch turning they are awarded +1 Levels each.

The following modifications will add 1 or more levels to the skill being performed (unless otherwise specified):

#### *Power/gymnastics*

- An additional +1 level for every 90-degree turn in power when the rope is pulled
- One handed frog-type skills
- An additional +1 level for each 360-degree rotation of the body in a power or gymnastics skill

#### *Interactions*

- Power skills done over another athlete, and an additional +1 level for each additional layer in a power skill
- +2 levels for flips over another athlete
- Assisted flips interaction (unless one athlete is supporting an athlete all the way around in the flip, in which case, reduce the level by 1)

#### 4.1.4 Wheel

When judging Wheel, judge every skill performed by each athlete, unless the athletes are in synchronized Wheel for single under rope manipulation or footwork skills. In this case, the athletes receive one skill mark and only the lowest level skill performed will be scored. Skills performed in a single rope fashion (where ropes are not shared between athletes) will not be scored. Wheel skills and modifiers are grouped by elements below.

Starting level	0	0.5	1	2	3	4	5	6
Multiples	Single		Double	Triple	Quad	Quintuple	Sextuple	
<b>Power</b>		Bubble (regardless of the number of wraps)	Basic power (not pulling rope): basic frog, basic push-up, butt bounce, back jump	Power pulling rope: frog, push-up, crab, two footed entry for frog	One handed power			Backwards power: examples- darkside, sunny D (if done by both athletes simultaneously)
<b>Gymnastics</b>			Cartwheel and round-off	Handsprings, kip, suicide	Flips			
<b>Rope Manipulation</b>	Side swing	Criss-cross, 180 on the ground	One hand restricted: toad (leg over cross), cougar (leg over), EB (one hand behind back)	Both hands restricted: AS, CL, TS, caboose, elephant, weave				
<b>Releases</b>			Basic release, Inversed release, snake release, floater	Mic release, 2 handled rope release	Lasso (snake release above head, catching it out of the air)			
<b>Scoops / Interactions</b>		Switching places	One jumper is scooped	Multiple jumpers are jumped by scoop, Multiple ropes moving during scoop, leap frog	Multiple ropes + multiple athletes moving during scoop			
<b>Footwork</b>		Footwork						

The following modifications will add 1 level to the skill being performed (unless otherwise specified):

#### *Multiples*

- Body rotation (at least 270 degrees in twist or flip direction): EK, BC, Full Twist
- An additional +1 level for every 180-degree turned in the air beyond a 360 when jumped ex. 540, 720, 900

#### *Power/gymnastics*

- **CrossesCriss-Cross** performed with power/strength skill and/or flips
- Landing in push-up, split or crab position
- Landing in frog position (+2)
- Assisted flips interaction (unless one athlete is supporting an athlete all the way around in the flip, in which case, reduce the level by 1)
- An additional +1 level for every 90 degree turn in power when the rope is pulled

#### *Manipulations*

- Switch crosses (ASxAS, criss-crossxcriss-cross, ASxCL as long as the arm on top changes...)
- Go-go's/crazy criss-cross (one hand crosses twice across body, leg or arm without uncrossing)
- Wraps (scored as described in section 4.1.2)
- Change direction of rope movement in the air (EK- rope continues in same direction: doesn't count)
- Switching handles
- Transition jump (jumping a one hand restricted skill and in one jump, jumping the opposite side one hand restricted skill (such as crouger-crouger))

#### *Releases*

- Catching a release in a restricted position
- Releasing a handle in a restricted position if, and only if, the hand is completely behind the body (behind the back or behind both legs)
- Catching a release with something other than a hand (such as scooping the rope, squeezing it with a body part, or landing the rope on a foot, shoulder or similar, jumping the rope with the rope caught on a body part)

#### *Exceptions*

- Kips and front handsprings with a whip (pulling the rope under before landing) are level 6
- The money-maker/kamikaze frog, back handspring pulling rope under before landing on hands are level 7

#### *Negative modifiers/limits*

- -1 level: Gymnastics with rope held with one hand

## 4.2 PRESENTATION

Presentation is divided into two sets of judges, Athlete Presentation ( $P_A$ ) and Routine Presentation ( $P_R$ ) judges. These judges make marks (+, ✓, -) throughout the routine.

### 4.2.1 Athlete Presentation – Form and Execution (Technicality)

To evaluate form and execution, a judge should watch for body posture and positioning, amplitude, and the flow and arc of the rope. Skills should be performed in the best possible way for judge and audience visibility, as well as aesthetics. Judges will make a mark for Form and Execution for every skill performed. In freestyle routines with more than one athlete, judges should award the average level of form and execution for each skill. For example, if one athlete in a pairs routine has Excellent form and execution but the other athlete has Basic form and execution, the skill should be awarded Average form execution.

Form and Execution (Technicality)		
- Basic	✓ Average	+ Excellent
Hunched over position, showing lack of skill, focus is towards the floor	Bent over to help execute the trick	Upright posture – shoulders and head up, back straight
Shows obvious effort to complete the skill. Legs or back are bent when not appropriate for the skill being performed	Performs moves well enough to complete the skill but with minor breaks in form	Clean lines and proper form at all times when performing the skill
Hesitation between skills, obvious effort in thought between completing skills. Long pauses or bobbles in the routine	Minor moments of hesitation. Executes short break in the flow of the routine	Smooth flow between skills and superior execution of the routine.
The arc of the rope(s) is wobbly	The arc of the rope(s) are not exceptional, but not bad	The arc of the rope(s) is continuous and smooth
Struggles to complete the skill. Low and hard landing of the skill	Slight break in form when landing the skill. Visible that it takes effort to complete the skill	Displays exceptional athleticism. High amplitude with a soft landing. Landing the skill upright or in the appropriate form for the skill being performed
Performing the skill while oriented in a direction that makes it difficult to evaluate	The skill is performed in a less than ideal position on the floor.	The skill is staged well in relation to the judges and audience. The directionality and position on the floor is visually pleasing to the intended audience
Pairs or teams are not coordinated or synchronized, and/or need to focus on each other to stay together	Pairs or teams are coordinated and synchronized	Pairs or teams are perfectly coordinated and synchronized without effort

### 4.2.2 Athlete Presentation – Misses

Athlete presentation judges also count misses as defined in section 4.4.1

#### 4.2.3 Routine Presentation – Entertainment

To evaluate the entertainment component of a routine, judges should watch for unique skills and combinations, varied movement across the floor, and smooth transitions between skills. Routine Presentation judges will also watch for repetition and repeated skills. This includes exact skills that are repeated as well as sections of the routine that begin to appear repetitive. For example, long multiple sequences, similar turner involvement during Double Dutch, etc. Judges will make a mark for entertainment at least every 2 seconds.

From the third time onwards (meaning 3<sup>rd</sup>, 4<sup>th</sup>, 5<sup>th</sup> time...) that a skill is clearly repeated during a routine it will receive a deduction. If a skill is repeated more than twice the routine presentation judge should record a special mark for repetition, in addition to their entertainment marks on repetitiveness. Note that a repeated skill might not necessarily constitute repetitiveness.

Variations that are not considered repeated:

- Changing the direction (forward vs. backwards)
- Different ways of entering or exiting a skill

Variations that are considered repeated:

- Performing a skill on a different side or with different arms
- Performing a skill in a different direction relative to the floor or rope (for example looking north, south, east or west)
- Performed by a different athlete (or different combination of athletes) in the routine

For the perspective of repetition in Double Dutch, it is helpful to look at the overall skill (the combination of jumper and turner activity) which is the entirety of a skill: the entry, exit, turner skills (for DD) and jumper(s). Generally, what happens between two jumps. Any change in turner or jumper skill constitutes a different overall skill. Simply switching athletes but performing the same overall skill does is still considered repeated.

Entertainment		
- Basic	✓ Average	+ Excellent
Displays a lack of confidence, no effort made to connect with the judges and audience, no visible eye contact made	May have moments of connecting with the judges and audience, but they are minimal and shows obvious inward concentration throughout the routine	Strong showmanship and stage presence demonstrated. Athlete performs a routine that captivates the judges and audience's attention. Effort made to make eye contact and connect with intended audience
The section of the routine is predictable and/or not designed from the spectator perspective	The section of the routine is neither interesting nor predictable	The section of the routine is interesting and entertaining to watch
The section of the routine is repetitive in comparison to other sections of the routine; athlete appears to have a limited repertoire of skills; an exact skill is repeated	The section of the routine has some variety of skills and combinations with some repetition in comparison to the routine as a whole	The section of the routine shows variety in comparison to the routine as a whole
Predictable movements or no movement, little to no rope direction changes	Athlete moves and uses the competition space, but movements and the athlete remains in one place for an extended period of time	Directionality of the rope and athlete movements are varied and unpredictable (interesting to watch)
Choppy transitions and breaks in flow	Transitions between skills exist but they are not interesting or well-executed	The athlete transitions smoothly and effortless between sections of the routine
Narrow variety of skills; sequences, and predictable/simplistic choreography	The skills are neither overly original nor overly predictable	Original moves, sequences, and choreography, "Wow" factor

#### 4.2.4 Routine Presentation – Musicality

To evaluate the musicality of a routine, judges should watch for effective use of music, unique music selection and choreography. Judges will make a mark at least every 2 seconds.

If a routine does not have any music this category should be marked with only one minus. However, if a competition cannot run music for some reason this category is not judged at all and no marks should be made.

Musicality		
- Basic	✓ Average	+ Excellent
Accents of the music do not correspond to elements of the routine; Little rhythmic connection between the beat and athlete's movements	Jumping is sometimes on-beat and on-rhythm; some alignment of accents and transitions between the music and the routine	Jumping is consistently on-beat and on-rhythm; excellent use of accents in the music to amplify the routine
The athlete doesn't use the music to connect with the choreography or style	The athlete embraces the spirit and style of the music	The style of jumping closely matches the music; the routine tells a story with the music, creates an emotional connection with the music
No effective starting and/or ending pose/sequence	Athlete uses starting and ending poses/sequences but without much impact on the quality of the routine	Starting pose/sequence creates anticipation for the routine; finishing pose marks a clear and graceful finish

### 4.3 REQUIRED ELEMENTS

In order to ensure that freestyle routines are well-rounded and varied, athletes will be required to perform certain skill types or elements. For each required element not fulfilled points will be deducted from the score.

#### 4.3.1 General

- Athlete(s) must successfully complete a skill that can be awarded a difficulty level for it to count as a required element
- Required elements may be performed in isolation or in sets
- Athletes can complete multiple required elements in the same skill
- Required elements can be performed at any difficulty level. However, athletes must jump their rope immediately after completing a required element
- In Single Rope Pairs and Team freestyle events, the required element must be performed by all athletes simultaneously
- For Double Dutch and Wheel events, a required element can be performed by any single athlete or combination of the athletes (they do not all need to participate in the skill for it to count)

#### 4.3.2 Single Rope

- 4 different multiples
  - Skills that involve the rope passing under an athlete's foot more than once per jump/skip
- 4 different gymnastics and/or power skills
  - Skills requiring athletes to be:
    - Jumping off their hands or forearms or from a starting position where their hands or forearms are touching the ground
    - Seated
    - On their back (supine)
    - Lying facing the ground (prone)
    - In a crab or split position
    - Having their head pass below their waist level and feet above the waist level at the same time
- 4 different wraps and/or releases
  - A release counts from when an athlete lets go of the handle(s) until they catch the rope and perform another type of jump/skip
  - A wrap involves jumping/skipping/stepping over the rope while the rope is wrapped around an athlete's body (or part of their body)

Additional Required Elements for Single Rope Pairs Freestyle and Single Rope Team Freestyle:

- 4 different interactions
  - Jumper interactions are skills completed in a way that the athletes support each other, share a rope, jump/skip another athlete with their rope (scoop), and/or perform skills over/under each other

#### 4.3.3 Double Dutch

- 4 different turner involvement skills
  - Turning the ropes in a manner other than standard Double Dutch or together in the same direction
  - Standard Double Dutch turning= turning the ropes in an alternating, opposite direction without multiples
- 4 different gymnastics and/or power skills
  - Skills requiring athletes to be:
    - Jumping off their hands or forearms or from a starting position where their hands or forearms are touching the ground
    - Seated
    - On their back (supine)
    - Lying facing the ground (prone)
    - In a crab or split position
    - Having their head pass below their waist level and feet above the waist level at the same time

In Double Dutch freestyle events with more than three athletes in the same routine, the following additional required elements exist:

- 4 different interactions
  - Jumper interactions are skills completed in a way that the athletes support each other, perform skills over/under or around each other, and/or physically connect with each other

#### 4.3.4 Wheel

- 4 different multiples
  - Skills that involve the rope passing under an athlete's foot more than once per jump/skip
- 4 different gymnastics and/or power skills
  - Skills requiring athletes to be:
    - Jumping off their hands or forearms or from a starting position where their hands or forearms are touching the ground
    - Seated
    - On their back (supine)
    - Lying facing the ground (prone)
    - In a crab or split position
    - Having their head pass below their waist level and feet above the waist level at the same time
- 4 different wraps and/or releases
  - A release counts from when an athlete lets go of the handle(s) until they catch the rope and perform another type of jump/skip
  - A wrap involves jumping/skipping the rope while the rope is wrapped around an athlete's body (or part of their body)
- 4 different interactions
  - Jumper interactions are skills completed in a way that the athletes support each other, perform skills over/under or around each other, and/or physically connect with each other. As well as athletes switching sides in reference to the judges (I.e. switching places)

## 4.4 DEDUCTIONS

### 4.4.1 Misses

A miss is defined as any of the following:

- any time a rope stops, unless an athlete is wrapping the rope, changing the direction of the rope, trapping the rope on a body part, and/or catching the rope in a pose
- if an athlete attempts to grasp the rope and misses catching any part of the rope during a release
- if a rope is pulled out of an athlete's hand during a skill

If a disturbance of the rope(s) occurs but it doesn't constitute a miss according to the above criteria, it is considered a "bobble", not a miss, and should therefore not be counted as a miss. However, it is accounted for by the presentation judges.

Another miss can occur on the next attempt to jump the rope(s).

In Single Rope events, a team can receive multiple misses simultaneously if the miss occurs in another (set of) rope(s).

Misses are counted per (set of) rope(s), not per athlete. During Single Rope partner interactions, Wheel events, and Double Dutch events, when a miss occurs, this is counted as one miss (not one miss per competitor).

### 4.4.2 Space Violations

A space violation occurs any time part of an athlete's body touches the ground outside of the competition boundary. The boundary marker itself is in-bounds.

If a space violation occurs, the judges must not score any skills completed outside of the boundary. They must resume judging once the athlete has re-entered the competition area.

An athlete cannot receive an additional space violation until they have successfully completed a skill within the competition area.

Judges must count all space violations during a routine. A space violation is equal to 1 miss.

### 4.4.3 Time Violations

If the athlete(s) moves to start their routine before their music is audible, or if the athlete(s) performs any jumps or routine-related moves after the ending signal indicating time has sounded, a time violation has occurred.

A maximum of 2 time violations can occur per routine. Judges must count all time violations during the routine. A time violation is equal to 1 miss.

## 5 JUDGING SHOW FREESTYLE EVENTS

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### 5.1 DIFFICULTY

Difficulty judges will award a level for each skill performed by the athletes. Judges should not score skills being completed if 25% of the team is not performing (I.e. either in a miss or standing still/not moving). (For example, 12 athletes performing four 3-wheels, one 3-wheel makes a mistake. The difficulty judge should not award points until all 3-wheels are actively jumping again.)

The difficulty levels of skills being performed will be determined by the Single Rope- (section 4.1.2), Double Dutch- (section 4.1.3) and Wheel (section 4.1.4) Matrices. Long Rope and Traveller will be judged using the following difficulty modifiers.

#### 5.1.1 Long Rope

The discipline involving long ropes with one rope being at least 6 meters long turned and jumped in any fashion. Some examples include (but are not limited to): the triangle, the umbrella, the rainbow, and the giant wheel.

##### *Starting level of 0 (not scored)*

2 turners not scooping themselves that are double bounce scooping 1 jumper with 1 rope

Add 1 full level of difficulty for each of the following:

##### *Turner Skills*

- Having multiple of any or all long ropes crossed/turning in a different direction
  - Ex. simple eggbeaters and simple umbrellas would both be level 1
- Turners scooping another turner
  - Ex. rainbow; also, Thai long rope or variants thereof like the Matrix
- Each additional rope turned by every turner on the floor
  - Ex. one basic triangle (3 turners with 1 or more jumpers) gives level 1 since all turners are turning 2 ropes
  - Additional example: a simple umbrella would still be level 1 since each turner is turning 1 rope. That would not add level (having the ropes crossed adds a level)
- Single bounce scooping, plus 1 additional level for each multiple under
  - Ex. +2 for double under scoops, +3 for triple under scoops, etc.
- Turners scooping themselves
  - +1 for one turner and +2 for both turners on the same rope
- Consecutive scooping (shotgun scoops/not taking a jump in between jumpers)
- All turners moving and/or rotating while scooping
- Turner performing skill while scooping
  - Use applicable Double Dutch (section 4.1.3) or Wheel (section 4.1.4) level of difficulty to add to the overall level of difficulty of a skill

***Jumper Skills***

- Having more than 1 person jumping inside any or all long rope(s)
  - Maximum of 1 added level regardless of adding more jumpers
  - Ex. simple rainbow with Single Rope jumper inside both long ropes gives level 3 (+1 for scooping turners inside long rope, +1 for having more than 1 person jumping inside the long rope, and +1 for combining disciplines of Single Rope inside long rope)
- Athlete(s) performing skills while being scooped
  - Use levels of difficulty from Single Rope (section 4.1.2), Double Dutch (section 4.1.3) and Wheel (section 4.1.4) to add to the overall level of difficulty of a skill
- Athlete(s) moving and/or rotating to be scooped while the turners are moving
- Athletes changing the formation while the turners are moving
  - ex. rotating the line, moving from one shape to another, switching places, etc.

***Combining Disciplines***

- +1 for each additional discipline combined

**5.1.2 Traveller**

A traveller is when an athlete scoops two or more athletes in a sequence. At a minimum, this sequence needs to be scooping one athlete and then scooping the next athlete with a maximum of one jump in between.

***Starting level of 0 (not scored)***

1 traveller/jumper using double bounce jumping with one or more jumps between scoops

Add 1 full level of difficulty for each of the following:

***Traveller skills***

- Single-bounce scooping, plus 1 additional level for each multiple under scoop
  - Single-bounce scooping aligns with the Single Rope matrix scoops (level 1 if one athlete is scooped by a traveller; level 2 if both the athlete and the traveller are jumped by the scoop)
    - i.e. +2 for double under scoops, +3 for triple under scoops, etc.
- Consecutive scooping (shotgun scoops/not taking a jump in between athletes)
- Backwards scooping (traveller jumps backwards while scooping the athlete)
- Blind scooping (traveller is facing away from the athletes when scooping; i.e. forwards jumping while scooping in front of the athlete gives +1, or backwards jumping scooping behind the athlete gives +2 [+1 for backwards scooping and +1 for blind scooping])
- Rotating while scooping
  - +1 for each 180-degree turn: 180 degrees gives +1, 360 degrees gives +2, 540 degrees gives +3, etc.
- Traveller(s) performing skill while scooping
  - use Single Rope levels of difficulty to add to the overall level of difficulty of a skill (section 4.1.2)
- Multiple travellers
  - +1 if there is a space or jump in between them, +2 if both scooping consecutively (+1 for multiple travellers and +1 for consecutive scooping)

***Athlete Skills***

- Athletes performing skills while being scooped
  - use levels of difficulty from Single Rope (section 4.1.2) and Double Dutch (section 4.1.3) to add to the overall level of difficulty of a skill
- Athletes moving and/or rotating to be scooped while the traveller(s) is/are moving
- Athletes changing the formation while the traveller(s) is/are moving
  - ex. rotating the line, moving from one shape to another, switching places, etc.

***Combining Elements***

- +1 for each additional element combined
  - ex. wheel traveller gives +1, wheel traveller scooped by a long rope gives +2, and so on

**5.2 PRESENTATION**

Presentation Judges in Show Freestyle Events are divided into two sets, like other Freestyle Events. These judges make marks (+, ✓, -) throughout the routine but at least every 2 seconds.

**5.2.1 Athlete Presentation – Form and Execution**

Form and Execution will be evaluated as described in section 4.2.1 in addition to the matrix below.

Form and Execution (Technicality)		
- Basic	✓ Average	+ Excellent
Formations are minimal and/or lines are not in alignment	Some variety in formations, mostly straight lines in formations	Multiple different formations; lines are spaced well and straight
Little or no effort made by athletes to use the floor. Display a lack of skill with movements on the floor	Athletes use the floor space fairly well and movements are performed at a moderate pace	Athletes use the floor space exceptionally well. Movements on the floor are smooth and quick.

### 5.2.2 Athlete Presentation – Style

To judge style, judges should look at how the athletes in the routine executes their part of the performance and connect to the audience.

Style (Athlete)		
- Basic	✓ Average	+ Excellent
Inappropriate/distracting facial expressions and body language.	Facial expression shows inward concentration and lack of eye contact. Behaviour/body language neither detracts from nor adds to the overall performance.	Facial expressions and body language are appropriate and professional, including but not limited to natural smiles and eye contact
Costumes/uniforms detract from the performance and do not fit with the music and choreography	Costumes/uniforms neither detract from nor add to the overall performance.	Athletes use their costumes/uniforms to improve the overall performance and enhance the musicality and choreography of the routine.
Displays a lack of confidence, no effort made to connect with the judges and audience. Behaviour on the floor detracts from the routine	Athlete may perform a strong routine and have moments of connecting to their intended audience but has moments of obvious inward concentration and lack of connection.	Strong showmanship and stage presence. Professional behaviour shown during the routine

### 5.2.3 Routine Presentation – Entertainment

Entertainment will be judged according to section 4.2.3.

### 5.2.4 Routine Presentation – Musicality

Musicality will be judged according to section 4.2.4.

### 5.3 REQUIRED DISCIPLINES

In order to ensure that team show is well-rounded and varied, athletes will be required to perform certain disciplines. For each required discipline not fulfilled, points will be deducted from the score.

#### 5.3.1 General

- Athletes must successfully complete a skill that can be awarded a difficulty level for it to count as a required discipline
- Athletes can complete multiple required disciplines at the same time
- Required disciplines can be performed at any difficulty level
- At least 50% of the team must be involved in the required discipline for it to be counted

#### 5.3.2 Disciplines

- Single Rope
- Double Dutch
- Wheel
- Long Ropes
- Traveller

### 5.4 DEDUCTIONS

Deductions are handled the same way as for other freestyle events with the following exception:

#### 5.4.1 Misses

Judges will count a miss if 50% of the active members of the team is involved in a miss at the same time. (see section 4.4.1)

#### 5.4.2 Space Violations

Space violations are not counted in Show Freestyle

## 6 RECOMPETING

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### 6.1 GENERAL

The head judge (in speed) or the floor manager after consulting the judge panel (in freestyle), will notify the tournament director immediately if an athlete has the option to recompete an event. The athlete will wait with the tournament director until the second attempt has been scheduled.

The tournament director will notify the coach or team representative who was present in the coach's box. If unavailable, the tournament director will notify the coach on record, national head coach or head of delegation. They will have 5 minutes to decide whether to recompete the event. If they choose not to recompete, they will be given the score originally counted by the judges.

The athlete(s) will be given a minimum of 10 minutes between attempts.

The score of the athlete(s)'s second attempt will be their final score.

### 6.2 VIDEO ISSUE

If a video recount is not possible for speed, and the video recount is needed, due to a technical issue such as the camera not recording the event properly, a file accidentally being deleted, a judge obstructs the view of the camera, or the camera ran out of space or power, then the athlete(s) will be given an opportunity to recompete the event.

### 6.3 BROKEN ROPE

If an athlete's rope breaks unintentionally during an event and the majority of judges agree the rope is broken, the athlete will be given one additional attempt to compete the event successfully.

However, once an athlete leaves the station, they can no longer claim a broken rope.

A broken rope includes but is not limited to:

- Frayed wire
- Rope separating from handle
- Snapped rope
- Broken handle (that impairs its use)
- Any breakage that halts the functionality of the rope.

If the rope breaks again on their second attempt, they will not be given another chance to recompete the event, but they may bring an additional (set of) rope(s) into the station for their second attempt to use if their rope breaks again. For Single Rope events one extra rope per athlete is allowed, for Double Dutch and Wheels one extra set of ropes is allowed.

For team events, the team only gets 2 attempts regardless of which athlete's rope breaks. This means that one athlete's rope could break in the first attempt and a different athlete's rope could break in the second attempt, but they will still only receive 2 attempts.

#### 6.4 MUSIC FAILURE

If the music fails during an event, the athlete(s) should continue the event without music. After the event, the music operator will be consulted to determine if the issue was caused by the equipment playing the music and if so, the athlete(s) will be given the opportunity to recompete the event.

If the wrong music is played, compared to what the athlete(s) submitted, they should stop their routine within 5 seconds. If they can provide the correct music within 10 minutes, they will be given the opportunity to recompete the event. No recompetes will be given if the athlete(s) have submitted the wrong music.

## 7 CALCULATION OF SCORES AND RESULTS

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The goal of this chapter is to be easily understood by the wider community of our sport as well as being clear and accurate as to leave no questions on how the calculations will be implemented. To meet both goals, some sections in this chapter will have a grey background that mark them as detailed explanations using mathematical formulas. Before each grey section, the concepts in grey will be explained as clearly as possible in steps and descriptions.

### 7.1 AVERAGING

If there are two judges of a type the two scores are averaged.

For example

Judge	Score
Judge 1	112
Judge 2	114

Gives an average of  $\frac{112+114}{2} = 113$

If there are three judges of a type the two closest scores are averaged, if the scores are equally spaced the benefit goes to the athlete and the two higher scores are averaged.

For example, in the following situation:

Judge	Score
Judge 1	112
Judge 2	114
Judge 3	118

Since judges 1 and 2 are closer (2 clicks) than judges 2 and 3 (4 clicks), scores from judges 1 and 2 are averaged for a total score of 113.

A similar situation:

Judge	Score
Judge 1	112
Judge 2	115
Judge 3	118

Since judges 1 and 2 are apart by 3 clicks and judges 2 and 3 are also apart by 3 clicks, the higher pair of scores (judges 2 and 3) are used. Those two scores are averaged for a score of 116.5.

If there are four or more judges of a type the highest and lowest scores are dropped, and the remaining scores are averaged. For example:

$$\frac{Judge_1 + Judge_2 + Judge_3 + Judge_4 - Judge_{max} - Judge_{min}}{4 - 2}$$

For example

Judge	Score
Judge 1	112
Judge 2	115
Judge 3	118
Judge 4	119
Judge 5	121

Judge 1 and Judge 5 who has the lowest and highest scores are dropped leaving judge 2, 3 and 4 which are then averaged  $\frac{115+118+119}{3} = 117.33$

## 7.2 ROUNDING

All variables are calculated without applied rounding, except for Capital Letter Variables and functions (such as  $R, D, P, M, Q, F_p, L(x)$ ) which is rounded to two decimal places (example if the variable is  $R$  then  $R = \frac{\lfloor R * 100 \rfloor}{100}$ )

## 7.3 CALCULATING SPEED AND MULTIPLES SCORES

Scores are collected from each judge and averaged according to section 7.1

This average is called  $a$ .

False starts and false switches cause a deduction of 10 clicks for each instance. The final score is the average of the two closest judge scores minus the deductions.

The amount of false starts and false switches as reported by the head judge are summed up and multiplied by ten, this is called  $m$ . ( $m = (starts + switches) \times 10$ )

The result, called  $R$ , is obtained by subtracting the deductions ( $m$ ) from the average score ( $a$ ). ( $R = a - m$ )

## 7.4 CALCULATING FREESTYLE SCORES

Freestyle scores are based on a cumulative Difficulty model where Presentation, Required Elements, Deductions, and Repeated Skills can affect the score.

Difficulty is calculated by adding the points from each skill performed. There is no limit on the total difficulty score.

Presentation increases or decreases the score by a percentage calculated from the presentation marks (+, ✓, or -).

Deductions take off a percentage for misses, and time and space violations.

Each missed required element will also take off a percentage from the total score, and so will repeated skills

The result/routine score (called  $R$ ) is obtained by multiplying the difficulty score ( $D$ ) with the presentation score ( $P$ ), the deduction score ( $M$ ), the required elements score ( $Q$ ), and the repetition score ( $U$ ). The result cannot be lower than 0.

$$R = D \times P \times M \times Q \times U$$

The calculation for each of these scores is described in the following sections.

### 7.4.1 Difficulty

There is no maximum difficulty score. The difficulty score is the sum of the total points for each skill performed in a routine. Every time a skill is successfully performed, the value of that skill is added to the difficulty score.

The points per level can be calculated with the following formulas where  $x$  is the level of the trick  
 $L(x) = 0.1 \times 1.8^x$  rounded to two decimal places. However, a level 0 skill is always worth 0 points.

The approximate point values per skill are:

Level	0	0.5	1	2	3	4	5	6	7	8
Points per trick	0.00	0.13	0.18	0.32	0.58	1.05	1.89	3.40	6.12	11.02

For each judge, a difficulty score will be calculated by multiplying the number of times the athlete(s) completes a skill by the point value of the corresponding skill level. (For example, if an athlete completes 10 level 1 skills, they will get 1.8 points, as  $10 \times 0.18 = 1.8$ ).

Then, the total points for each level are added together to get a total difficulty score for that judge. For example, if an athlete completes 10 level 1 skill, 10 level 2 skills and 10 level 3 skills they will get 10.8 points ( $10 \times 0.18 + 10 \times 0.32 + 10 \times 0.58 = 1.8 + 3.2 + 5.8 = 10.8$  points).

The score of every difficulty judge is calculated by multiplying the amount of skills recorded at that level by that judge (called  $n_x$ , where x is the level) with  $L(x)$  for each level, and adding the results (called  $s_x$ ) for each level together, (the resulting sum is called  $d_j$ , where j is the judge number. This means judge 1 is called  $d_1$ , judge 2 is called  $d_2$ , etc.) For example:

$$\begin{aligned}s_1 &= L(1) \times n_1 \\ s_2 &= L(2) \times n_2 \\ d_1 &= \sum_{n=1}^x s_n = s_1 + s_2 + \dots + s_x\end{aligned}$$

All difficulty judges' scores are then averaged together according to section 7.1, the result is called  $D$

#### 7.4.2 Presentation

The Presentation score will be multiplied by the difficulty score, which can raise or lower the total score. The presentation score can impact the routine in a range of +35% to -35%. The presentation score is broken down into three categories at weights as follows:

- Form/Execution: 50% of the 35%
- Entertainment: 25% of the 35%
- Musicality: 25% of the 35%

The range from ±35% can in other words be broken down into three ranges of:

- Form/Execution: ± 17.5%
- Entertainment: ± 8.75%
- Musicality: ± 8.75%

To calculate the presentation score, the marks of each judge are given a value, with the check being 0, the minus being the negative value of that category and the plus being the positive value of that category. Within each category, the average mark values for all judges are averaged according to section 7.1. Then the categories are all added together for the final presentation adjustment value.

The presentation score may impact the difficulty score by a total factor of  $F_p = 35\% = 0.35$

Where the Form and Execution category may impact the score by a factor of  $F_{p,F} = \frac{1}{2}F_p$ ,

the Entertainment category may impact the score by a factor of  $F_{p,E} = \frac{1}{4}F_p$ ,

the Musicality category may impact the score by a factor of  $F_{p,M} = \frac{1}{4}F_p$

In events where tournament organisers have decided music won't be used the following factors are used

Form and Execution category may impact the score by a factor of  $F_{p,F} = \frac{1}{2}F_p$

the Entertainment category may impact the score by a factor of  $F_{p,E} = \frac{1}{2}F_p$

the Musicality category may impact the score by a factor of  $F_{p,M} = 0$

The scores of each category (Form and Execution, Entertainment, Musicality) for each judge is calculated on a scale from  $-1$  to  $1$  as  $j_F, j_E, j_M$  by averaging the marks the judge has given in that category where “ $-$ ” is worth  $-1$ , (the amount of negative marks given by a judge for a specific category is called  $n_{x,minus}$  where  $x$  is  $F, E$  or  $J$ , for the category) “ $\checkmark$ ” is worth  $0$  (Despite this, the marks are important as they are part of the average and brings the score closer to the average; the amount of checkmarks given by a judge is called  $n_{x,check}$ ) and “ $+$ ” is worth  $1$ . (the amount of positive marks given by a judge is called  $n_{x,plus}$ )

$$j_x = \frac{-1 \times n_{x,minus} + 0 \times n_{x,check} + 1 \times n_{x,plus}}{n_{x,minus} + n_{x,check} + n_{x,plus}} = \frac{n_{x,plus} - n_{x,minus}}{n_{x,minus} + n_{x,check} + n_{x,plus}}$$

The averages of all judges' scores for each category is then averaged as  $a_F, a_E$ , and  $a_M$  by averaging  $j_x$  for all judges who judged that category according to section 7.1

To calculate the multiplication factor that will be used to calculate the final score, the averages  $a_x$  are multiplied by their respective factor  $F_{p,x}$  and added to 1, this is called  $P$ .

$$P = 1 + (a_F \times F_{p,F} + a_E \times F_{p,E} + a_M \times F_{p,M})$$

Alternatively, each judge's category scores can be calculated as follows

$$\frac{n_{x,minus} \times (1 - F_{p,x}) + n_{x,check} + n_{x,plus} \times (1 + F_{p,x})}{n_{x,minus} + n_{x,check} + n_{x,plus}}$$

Those scores are then averaged per category according to section 7.1, the averages are summed called  $P$

### 7.4.3 Deductions

The required element judges and Athlete Presentation judges count misses. These are averaged to get the number of misses. Each miss will take 2.5% off the total routine score.

The Athlete Presentation judges count some additional deductions which are time and space violations, those are calculated and averaged separately and added to the average amount of misses to determine the final deduction value

Each deduction (miss, time violation, space violation) may impact the score with a factor of  $F_d = 2.5\% = 0.025$

The average number of misses recorded by the Required Element and Athlete Presentation judges are calculated according to section 7.1. This average is called  $a_m$  and is rounded to a whole number, the factor  $F_d$  is then multiplied with  $a_m$ , the result is called  $m$ . ( $m = F_d \times [a_m]$ )

The average number of additional violations (time and space) recorded by the required element judges are calculated and called  $a_v$ , this average is also rounded to a whole number, the factor  $F_d$  is then multiplied with  $a_v$ , the result is called  $v$ . ( $v = F_d \times [a_v]$ )

The misses ( $m$ ) and violations ( $v$ ) are summed together and subtracted from 1, the result is called  $M$  and cannot be lower than 0. ( $M = 1 - (m + v)$ )

### 7.4.4 Repeated Skills

The Routine Presentation judges counts repeated skills, these are averaged to get the number of repeated skills. Each repeated skill will take 1.25% off the total routine score

Each repeated skill may impact the score with a factor of  $F_r = \frac{1}{2}F_d = 1.25\% = 0.0125$

The average number of repeated skills recorded by the Routine Presentation judges are calculated according to section 7.1. This average is called  $a_r$  and is rounded to a whole number, the factor  $F_r$  is then multiplied by  $a_r$ , the result is called  $r$ . ( $r = F_r \times [a_r]$ )

The repeated skills ( $r$ ) is subtracted from one, the result is called  $U$  and cannot be lower than 0. ( $U = 1 - r$ )

#### 7.4.5 Required Elements

Each missing execution of a required element contributes a 2.5% deduction. For example, in an individual Single Rope freestyle routine:

	Number Required	Number Performed	Missing Required Elements	Deduction
Multiples	4	4	0	0
Gymnastics/Power	4	3	1	2.5%
Wraps/Releases	4	1	3	7.5%
<b>Total required element deduction:</b>				<b>10%</b>

Each missed required element may impact the score by a factor of  $F_q = F_d = 2.5\% = 0.025$

The average number of missing required elements recorded by the required element judges are calculated and called  $a_q$ , this average is rounded to a whole number, the factor  $F_q$  is then multiplied by  $a_q$ , the result is called  $q$ . ( $q = F_q \times \lfloor a_q \rfloor$ ) (Note that required elements are counted per instance of each required element, not per group of required elements, for example, if the required elements are 4 basic jumps and 4 double unders and the athlete performs 2 basic jumps and 3 double unders this corresponds to  $2 + 1 = 3$  missed required elements)

The required elements ( $q$ ) are subtracted from 1 to be converted into a factor, the result is called  $Q$  ( $Q = 1 - q$ )

#### 7.4.6 Result

The final score takes the difficulty score, adjusts up or down a percentage for presentation, then adjusts down a percentage for any deductions, then adjusts down a percentage for repeated skills, and finally adjusts down a percentage for any missed required elements. The minimum score is 0.

The result, called  $R$ , is obtained by multiplying the difficulty score ( $D$ ) with the presentation score, ( $P$ ) the deduction score ( $M$ ), the required elements score ( $Q$ ), and the repetition score ( $U$ ). The result cannot be lower than 0.

$$R = D \times P \times M \times Q \times U$$

## 7.5 CALCULATING SHOW FREESTYLE SCORES

### 7.5.1 General

The results for the show freestyle are generally calculated in the same way as any other freestyle but with the following exceptions

### 7.5.2 Presentation

The presentation score may impact the difficulty score by a factor of  $F_p = 50\% = 0.50$

Where the Form and Execution category may impact the score by a factor of  $F_{p,F} = \frac{1}{4}F_p$

the Style category may impact the score by a factor of  $F_{p,S} = \frac{1}{4}F_p$

the Entertainment category may impact the score by a factor of  $F_{p,E} = \frac{1}{4}F_p$

the Musicality category may impact the score by a factor of  $F_{p,M} = \frac{1}{4}F_p$

$x$  can be  $F, S, E$  or  $J$ , for the category to accommodate Style.  $j_S$ , and  $a_S$  are calculated the same way as other  $j_x$ , and  $a_x$  and  $a_S$  is added to  $P$  the same way as other  $a_x$ .

### 7.5.3 Required Disciplines

These are calculated like the Required Elements, see section 7.4.5 however a required discipline can be either performed or not performed, hence the maximum number of uncompleted required disciplines are the same as the number of required disciplines.

Each missed required discipline may impact the score by a factor of  $F_q = 5\% = 0.05$

## 7.6 CALCULATING THE RANKING

### 7.6.1 Speed Events

The athlete or team with the highest result ( $R$ ) is ranked first (rank 1). The athlete with the second highest result is ranked second, (rank 2) and so on.

In the case of a tie, where the number of athletes or teams ( $m$ ) have the same result ( $R$ ), which would result in the rank ( $n$ ), all those athletes or teams are awarded the same rank ( $n$ ). The next best result ( $R$ ) is ranked with rank plus the number of teams/athletes ( $n + m$ ). For example, if 3 athletes ( $m= 3$ ) have the same speed score and rank 4<sup>th</sup>, they all get ranked fourth (rank 4). The athlete with the next score gets ranked seventh, (rank 7) since  $n$  is 4 and  $m$  is 3 their sum is 7 ( $4 + 3= 7$ ).

### 7.6.2 Freestyle Events

The athlete or team with the highest result ( $R$ ) is ranked first (rank 1). The athlete with the second highest result is ranked second, (rank 2) and so on.

In case of a tie, where multiple teams or athletes have the same result ( $R$ ), the athletes or teams will be further compared based on their deduction score ( $M$ ). The athlete or team with fewer deductions is ranked first.

If this does not resolve the tie, the athletes or teams with the same result, and deduction score, and difficulty score, will be further compared based on their Required Elements score ( $Q$ ). The athlete or team with fewer missed required elements are ranked first.

If this does not resolve the tie, the athletes or teams with the same result, deduction score, and required elements score will be further compared based on their presentation score ( $P$ ). The athlete or team with the higher presentation score is ranked first.

If this does not resolve the tie, the athletes or teams with the same result and deduction score, required elements score, and presentation score will be further compared based on their repeated skills score ( $U$ ). The athlete or team fewer repeated skills is ranked first.

If this does not resolve the tie, the athletes or teams with the same result, deduction score, required elements score, presentation score and repeated skills score will be further compared based on their difficulty score (D). The athlete or team with the higher difficulty score is ranked first.

If this does not resolve the tie, the athletes or teams with the same result, deduction score, and difficulty score, will be further compared based on their presentation score ( $P$ ). The athlete or team with the higher presentation score is ranked first.

If this does not resolve the tie and there are  $m$  athletes or teams with the same result, deduction-, required elements-, presentation-, repeated skills-, and difficulty score, which would result in the same rank  $n$ , all those athletes or teams are awarded rank  $n$ . The next best result ( $R$ ) is ranked with rank  $n + m$ .

### 7.6.3 Overall and All-Around Results

The winner of the overall/all-around competitions is determined by the sum of their ranks in each event. The winner will have the lowest rank sum. For example, if an athlete places rank 1, rank 2, rank 3 in their three events, the sum of their ranks is 6 ( $1 + 2 + 3 = 6$ ). (the rank sum is called  $T$ )

In the Individual Overall Competition, the rank for the Single Rope Individual Freestyle get multiplied by 2 before adding it to the rank sum.

In case of a tie, the scores for each event are recalculated into a normalized score to preserve the differences between the scores while still making the events play an equal role in the result.

The highest score in an event gets a score of 100, the lowest score gets a score of 1.

To convert a result ( $R$ ) into a normalized score the highest score of the competitors in that event entered into the Overall/All-Around is called  $h$ , the lowest score is called  $l$ , the Normalized score is called  $N$  and the following operation is performed for each entry

$$N = \frac{(100 - 1)(R - l)}{h - l} + 1$$

In the Individual Overall Competition  $N$  for Single Rope Individual Freestyle is multiplied by 2 to give freestyle a simulated equal impact as speed.

The normalized scores for all the events are then summarized into a total normalized score, the tie breaker (called  $B$ ) The athlete/team with the highest total normalized score is ranked first in the tie, the second best total normalized score is ranked second and so on.

## 7.7 THE RESULTS

### 7.7.1 General

All published results must be accompanied with details identifying the event(s), and athlete(s) or team(s). Each athlete/team should have a unique id, name/team name, country/club, and, for team events, names of the athletes competing the event published with their results.

### 7.7.2 Unofficial Results

Prior to results being verified and authorized, some results may be published as unofficial scores. These are unofficial scores and not finalized until results are officially published and announced. It is not required to publish unofficial results and all variables are optional.

For speed events, the result ( $R$ ) and rank ( $S$ ) may be published.

For freestyle events, the result ( $R$ ), difficulty score ( $D$ ), presentation score ( $P$ ), deduction score ( $M$ ), Required Elements score ( $Q$ ), repeated skills score ( $U$ ) and rank ( $S$ ) may be published.

For Overall and All-Arounds, the result for each event ( $R$ ), normalized score for each event ( $N$ ), total normalized score ( $B$ ), rank for each event ( $S$ ), Rank sum ( $T$ ), and total rank ( $S$ ) may be published.

### 7.7.3 Official Results

After all verifications have been made, the results can be published. These should include everything listed under section 7.7.2 with the difference that only  $N$  and  $B$  are optional (they must be published if a tie had to be resolved in that Overall or All-Around category)